Castle Mountains Restoration Project

Visual Resource Report

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For:

Belt Creek and White Sulphur Springs Ranger District
Helena-Lewis and Clark National Forest

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Introduction

The Lewis and Clark National Forest is proposing the Castle Mountain Restoration project. The project area is located to the Southeast of the community of White Sulphur Springs, Montana. A Landscape Assessment was completed in 2011 by the Forest Service. The purpose of the project is to move the Castles Mountains toward a more resilient forest and grassland ecosystem that will address the departure in fire regime condition class to reduce the future threat of high intensity wildfire and the associated hazards to the public, fire suppression resources, valued structures and community infrastructure such as power corridors and the Willow Creek municipal watershed. In order to achieve this, there is a need to restore to a more mosaic vegetation age class and fuel structure across the landscape that will be more resilient to disturbance over time. The implementation of vegetative treatments by mechanical, hand and or prescribed fire actions across portions of the landscape will provide additional diversity in age classes, species, and reduce conifer encroachment in natural meadow openings. The project is designed to meet ecological productivity along with economic and social goals for the Castle Mountains. These actions will meet goals of reducing the probability of post-wildfire watershed impacts to the Willow Creek municipal watershed and associated costs.

Potential impacts to visual resources didn't drive the development of alternatives. However, analysis of potential impacts to visual resources is necessary to determine forest plan consistency.

The Forest Plan uses Visual Quality Objectives (VQOs) when setting objectives to manage the viewed landscape. The VQO's were determined using the Visual Management System (VMS) framework found in Agricultural Handbook (AH) 462, "National Forest Landscape Management Volume 2, Chapter 1, The Visual Management System". Components of VMS used when analyzing effects from management activity on the visual resource are discussed in the Methodology section of this report. All VMS components referred to in this report are defined in the Definitions section of this report. This report is completed to determine compliance with the direction found in the Forest Plan and Other Relevant Laws, Regulations, Policies and Plans.

Relevant Laws, Regulations, and Policy

Regulatory Framework

Applicable Laws

- The National Environmental Policy Act of 1969 (NEPA)- NEPA states that it is the "continuing responsibility of the Federal Government to use all practicable means to assure for all Americans, aesthetically and culturally pleasing surroundings."
- The Forest and Rangeland Renewable Resources Planning Act (1974) – This act provides direction to conduct aesthetic analysis and assess the impacts on aesthetics for timber harvesting.
- The National Forest Management Act (1976) – This act provides direction that the preservation of aesthetic values is analyzed at all planning levels.

Regulations and Directives

The Forest Service has routinely included both scenery and recreation as part of the 1960 Multiple Use-Sustained Yield Act. The following USDA handbooks establish a framework for management of scenic resources. The Visual Management System (VMS) has now been replaced by the Scenery Management System; Landscape Aesthetics, A Handbook for Scenery Management, Agriculture Handbook 701: 1995 provides guidance on the scenery management system. The handbooks still apply to management of scenic resources.

- National Forest Landscape Management Volume 1. Agriculture Handbook 434: 1973
- Utilities, Chapter 2, Agriculture Handbook 478: 1975
- Range, Chapter 3, Agriculture Handbook 484: 1977
- Roads, Chapter 4, Agriculture Handbook 483: 1977
- Timber, Chapter 5, Agriculture Handbook 559: 1980
- Fire, Chapter 6, Agriculture Handbook 608: 1985
- Ski Areas, Chapter 7, Agriculture Handbook 617: 1984
- Recreation, Chapter 8, Agriculture Handbook 666: 1987

Forest Plan Direction

Forest Plan direction for visual/scenic resources applicable to the Castle Mountain Restoration project are shown below.

Forest Wide Goals

Coordinate resource development and use activities so as to protect and improve land and resource quality and productivity, including natural beauty and quality of air, water and soil. (USDA, 1986)

Forest Wide Objectives

Landscape management will be emphasized in areas that are seen from identified visually sensitive roads and trails. In other areas of the Forest, landscape management mitigation principles will be applied to resource activities that may affect the visual setting. (USDA, 1986)

Forest Wide Standards

(1) Landscape management principles will be applied to all activities on the Forest (FSM 2380). This will be accomplished by implementing the procedures defined in National Forest Landscape Management, Volume 2, Chapter I, the Visual Management System (Agriculture Handbook No. 462).

(2) A VQO (visual quality objective) is stated for each management area. These VQOs provide the guideline for altering the landscape. If the VQO conflicts with the management prescription, then the prescription will prevail, unless the area is within the seen areas of the roads or trails identified on Forest Plan maps. These roads and trails are in sensitivity level 1; all recreation use areas included in Management Area H are also assigned sensitivity level 1. Seen areas from the designated roads and trails, and recreation use areas will be managed for the protection or enhancement of scenic values.

The seen areas associated with these roads, trails and use areas occur in different management areas with different prescriptions. In these seen areas visual resource management principles will be emphasized and visual impacts mitigated to meet the VQO. The mitigation is described in terms of existing visual condition (EVC). For a description of EVC, see Appendix N of the Forest Plan.

(3) Emphasis will be given to acquaint the public with and explain the Forest Service visual management system.

Forest Wide Standards Continued.

The Forest adjacent to or as seen from all or segments of the roads listed in the table below, as shown on Forest Plan maps, will be managed for its visual resource.

Table 1 Roads Managed for Visual Resource

Roads:
U.S. Highway 12
U.S. Highway 89
Four Mile Rd 211

Sensitivity Level I viewpoints

Additional Sensitivity Level I viewpoints were analyzed in the Oil and Gas Leasing Analysis, described in the Forest Plan, page 2-29. The following Sensitivity Level I viewpoints are added to the Forest Plan viewpoints for roads and trails: Smith River, Jefferson Division.

Management Area Direction

The National Forest land within the Lewis & Clark National Forest has been divided into 18 management areas, each with different management goals, resource potential, and limitations. Management areas within the Castle Mountain Restoration project area include C, D, E, G, H, J, and L. Specific direction related to visual/scenic resource for each management area is described in the table below.

Table 2 Management Areas in the Castle Mountains with corresponding Visual Quality Objectives

Management Area	Visual Quality Objective
C	Partial Retention/ Modification/ Retention
D	Partial Retention
E	Partial Retention
G	Retention/ Partial Retention
H	Retention/ Partial Retention
J	Retention/ Partial Retention
L	Partial Retention/ Modification

MA-C Visual Standard:

Within Management Area C, the corresponding VQO will be partial retention or modification. Retention may be appropriate if the activity is within the seen area of a sensitivity level 1 road, trail, or use area. (See Forest-wide Standard--Visual Resource A-8). If the VQO is not achieved and the visual impacts can be classed as EVC 5 or greater, the land should be rehabilitated within 2 years to at least an EVC class 4. (See Appendix N for EVC definition.)

MA-D&E Visual Standard:

Within Management Area D and E, the corresponding VQO will usually be partial retention, although if the landscape is changed by resource activities, the natural appearance of the landscape remains dominant. The modification VQO is acceptable when activity is not visible from an arterial road. If the VQO is not met and the visual impacts can be classified as EVC 4 or greater, the site should be rehabilitated within 2 years to restore the landscape to at least an EVC Class 3. (See Appendix N for EVC definition.)

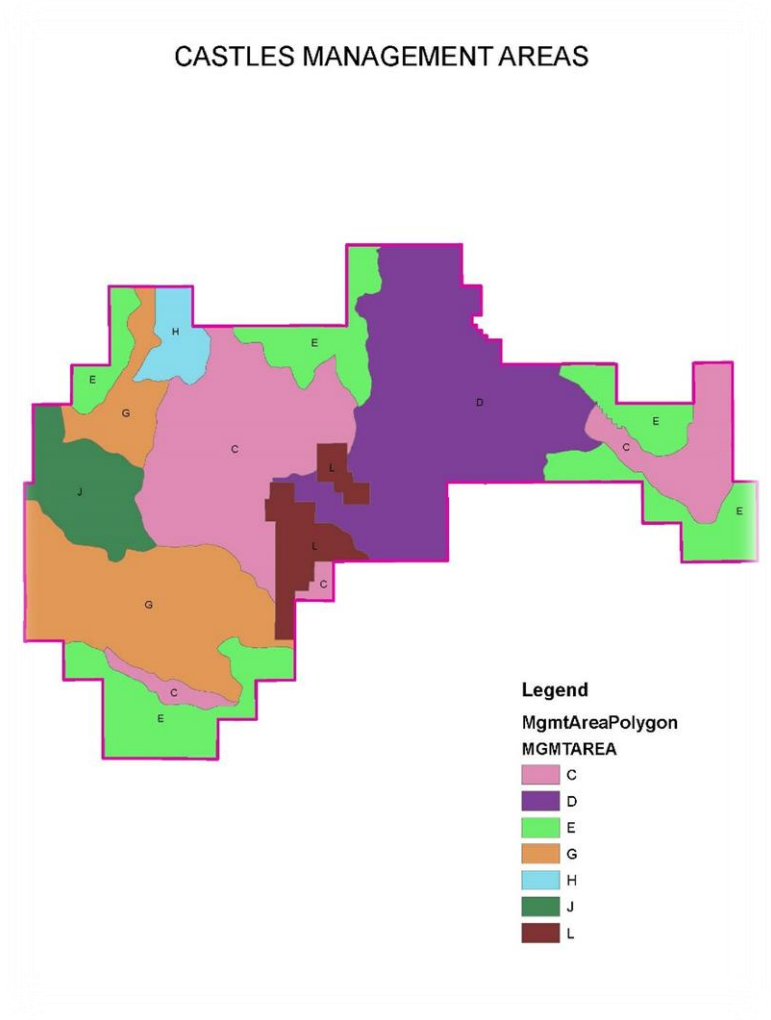

Figure 1 Castle Management Areas

MA-G Visual Standard:

Within Management Area G, the corresponding VQO will usually be retention or partial retention. Landscape changes will not be evident to the average person. Modification may not be appropriate in this management area. If the VQO is not met and the visual impacts can be classed as EVC 3 or greater, the site should be rehabilitated within 1 year to restore the landscape to at least EVC Class 2 (See Appendix N for EVC definition.)

MA-H Visual Standard:

Within Management Area H, the corresponding VQO will usually be retention or partial retention. Although the landscape is changed by resource activities, the appearance of the landscape remains dominant. The modification VQO is acceptable when activity is not visible from an arterial road. If the VQO is not met and the visual impacts can be classified as EVC 4 or greater, the site should be rehabilitated within 2 years to restore the landscape to at least EVC Class 3. (See Appendix N for EVC definition.)

MA-J Visual Standard:

Within Management Area J, the corresponding VQO will usually be retention or partial retention. Landscape changes may be noticed by the average person, but will not attract attention. The natural

appearance of the landscape still remains dominant. Modification is acceptable when an area is not visible from an arterial road. If the VQO is not met and the visual impacts can be classed as EVC 3 or greater, the site should be rehabilitated within 1 year to restore the landscape to at least EVC Class 2 (See Appendix N for EVC definition.)

MA-L Visual Standard:

Within Management Area L, the corresponding The VQO will usually be partial retention or modification. Retention may be appropriate if the activity is within the seen area of a sensitivity level 1 road, trail or use area. (See Forestwide Standard--Visual Resource A-8.) If the VQO is not achieved and the visual impacts can be classed as EVC 5 or greater, the land should be rehabilitated within 2 years to least an EVC Class 4. (See Appendix N for EVC definition.)

FSM 2300 – Recreation, Wilderness, and Related Resource Management, Chapter 2380 – Landscape Management

Currently it is Forest Service Policy to apply scenery management principles routinely in all National Forest activities. The scenery management principles are found in Agriculture Handbook (AH) 701, "Landscape Aesthetics, A Handbook for Scenery Management". Nevertheless, Forest Service Manual 2380.62 states to "consult the superseded AH 462 for background information useful in understanding Forest land and resource management plans …, which utilized the Visual Management System in place prior to publication of AH 701" (USDA Forest Service 2003). Additional direction in the Visual Management System Handbook applicable to this project follows.

The VMS handbook states "It may not be possible to immediately achieve the prescribed visual quality objective with rehabilitation, but it should provide a more visual desirable landscape in the interim" (USDA Forest Service 1974, p. 40). In addition, it also states "Landscape rehabilitation is a short-term management alternative used to restore landscapes containing undesirable visual impacts to a desired visual quality" (USDA Forest Service 1974, p. 40). The VMS handbook states that "once the short-term goal is attained, one of the five quality objectives is then applied" (USDA Forest Service 1974, p. 28). Rehabilitation could be used for management activities (prescribe fire, thinning etc.) when the management activities "provide a more desirable landscape in the interim" provided that the appropriate mitigations are implemented to meet the VQO in the shortest time frame possible. Identification of the landscapes needing rehabilitation should normally be done at the time quality objectives are applied. Also, the VMS handbook states that rehabilitation "is used to upgrade landscapes containing visual impacts which do not meet the quality objectives set for that particular area" (USDA Forest Service 1974, p. 28).

Assumptions

This analysis assumes that the existing condition within the project area is in compliance with Forest Plan Goals, Objectives, Standards and Management Area Direction regarding management of visual resources.

An entire unit was assumed to be viewed if any portion of the unit was viewed from a sensitive area. It was also assumed private property adjacent to the project area provided foreground views to the project area. The most revealing distance zone was assigned to the unit if that unit was viewed from multiple distance zones. The most restrictive VQO was assigned to a unit if more than one VQO existed for that unit. Effects to the most restrictive VQO (assigned through Forest Plan direction) from the most revealing distance zone were determined for viewed units. This allowed the greatest potential impact viewed in the landscape to be disclosed.

Design features necessary to meet the most restrictive VQO from the most revealing distance zone were developed. It was assumed a design feature that decreased viewed effects to a VQO from the most revealing distance zone would also decrease the effects viewed from other lesser revealing distance zones. If a design feature was needed to meet a VQO in a viewed unit it was assumed the design feature would be applied across the entire unit depending on topography and shape of that unit.

When determining if there would be adverse impacts upon analyzing cumulative effects it was assumed that suggested design features would be implemented. The rehabilitation goal was used where it was determined proposed activities would not immediately achieve the assigned VQO due to the existence of one of the following scenarios:

- A disturbance (natural or manmade) dominated the unit.
- The proposed activity allowed the desired future condition defined in the Silviculture report to be achieve sooner than with no action.
- The current existing condition hindered the desired future condition of the landscape to be met in the short-term.

Insect infested trees were considered obtrusive elements. It was assumed a landscape with less visible dead trees is a visually desired landscape. These assumptions are based on Forest Service handbook guidance, which states natural disturbances are considered alterations to the characteristic landscape and the characteristic landscape is defined as what visually represents the basic vegetative patterns, landforms, rock formation and water forms viewed (USDA Forest Service 1980, p. 55 and USDA Forest Service 1974, p.7). This assumption differs from some public comments received on personal preferences of viewing aesthetics. It was assumed existing and new landings may be viewed in units with proposed activities. Specific landing location information was not available. It is assumed that no catastrophic fires or additional fires would occur when analyzing effects for the no action alternative. Beetle caused mortality exists within the existing mature lodgepole pine stands in the project area and is expected to increase.

Design Criteria/Mitigation

Design criteria selected from the Northern Region's Scenic Resource Mitigation Menu & Design Considerations for Vegetation Treatments (2009). Based on review of the action alternatives, the following design considerations are recommended. The list is not all inclusive and some may not be applicable to the entire project area, e.g. some will be more suitable to units in areas seen in foreground views and others to units in areas seen in background views. To the extent feasible, the following should be considered during unit layout and implementation.

- All treatment units:
    - Units, including fuel breaks, would be blended with natural landscape features such as natural openings, rock outcrops, and topography where possible. Harvest units would be shaped to mimic natural patterns found in the landscape where possible. Use of straight lines or geometric shapes along edges would be minimized during unit design where feasibility and safety allows.
    - The Landscape Architect would work with resource specialists including timber and fuels layout crews for unit design during implementation to achieve visual objectives where feasible.
    - Disturbed areas, including but not limited to temporary road, landing construction, etc. would be re-vegetated after the site has been satisfactorily prepared.
    - All equipment and construction debris would be removed from units immediately following completion of implemented activities.
    - Temporary road locations should be designed to fit the landscape with a minimum degree of landform alteration limiting the amount of earthwork. Planning the design of alignments and reseeding of cut and fill slopes should consider minimizing impacts to scenic resources.

- In units within M-1 management areas, burned areas should be small in the foreground (0 to ½ mile from roads or trails), and have a mosaic of burned and unburned islands. (Agriculture Handbook # 608, Pg. 28 and 29.)
- Slash piles would be burned to achieve 95% or more consumption. Following burning, concentrations of unconsumed slash would be scattered.

Monitoring
Monitoring shall be conducted during the final design, layout and implementation of the project to ensure design measures are applied to minimize impacts to scenery. Within the first two years of project implementation, monitoring will occur in order to assess the effectiveness of mitigation measures in meeting VQOs within those units that are potentially sensitive to change to scenery resources.

Purpose and Need

The intent of this management activity is to move the Castles Mountains project area toward a more resilient forest and grassland ecosystem. Visual resources did not drive the projects Purpose and Need for Action, however visuals were analysis in order to adhere to the Lewis & Clark forest plan direction for visual resources.

Issues

There were no issues raised relevant to the development of alternatives for the visual resource.

Resource Indicators and Measures

Indicator

The viewed VQO's assigned in the Forest Plan within provided the primary qualitative analysis indicator when determining direct and indirect effects. Consideration of an activity's "duration of impact" and "degree of alternation" within the viewed VQO also provided qualitative analysis indicators. The degree of acceptable alteration ("degree of alteration" and "duration of impact") for each VQO was determined considering natural disturbances found in the characteristic landscape (USDA Forest Service 1974, p. 27-28). The size of a management activity is compared to the size of similar natural activities expected in the landscape.

Activities mimicking natural disturbances or simulating vegetation patterns found or expected to be found in the landscape are said to be viewed similarly to their natural counterparts by the casual forest visitor. "Duration of impact is discussed in more detail in the Temporal Boundaries section of this report. Changes in the characteristic landscape attributes, when considering past, present, and reasonably foreseeable activities (natural or manmade) within all seen areas, provided the qualitative analysis indicator when determining cumulative effects.

Viewed VQO acres within distances of sensitive areas affected by management activities were determined in order to provide additional quantitative analysis indicators for alternative comparisons (USDA Forest Service 1974, p. 7).

Spatial Context for Effects Analysis

The project area and the viewshed from within and adjacent to the project boundary cover the spatial extents of this analysis. Views extending beyond the project analysis area from sensitive areas were determined. In addition, views into the project area from sensitive areas and lands of other ownership (i.e., state, federal and private lands) were determined. When assessing direct and indirect effects from sensitive areas, the viewed units within the seen area were considered the spatial boundary. When

assessing cumulative effects all viewed lands within the seen area from sensitive areas were considered the spatial boundary.

Temporal Boundary for Effects Analysis

The temporal boundary used varied from "immediate upon project completion" up to five years (short-term) and up to twenty years (long-term) when analyzing effects from an activity. The short-term timeframes were determined by reviewing the VQO information provided below. When determining if the "duration of impact" was met for each VQO upon implementation of a management activity, the criteria below was considered short term.

- Retention – "Reduction in line, form, color, and texture contrast should be accomplished during operation or immediate upon project completion" (USDA Forest Service 1974, p. 30).
- Partial Retention – "Reduction in line, form, color and texture should be accomplished as soon after project completion as possible or at a minimum within the first year" (USDA Forest Service 1974, p. 32).
- Modification – "Reduction in line, form, color, and texture should be accomplished in the first year or at a minimum should meet existing regional guideline" (USDA Forest Service 1974, p. 34).
- Rehabilitation – the VMS does not define a timeframe for duration of impact.

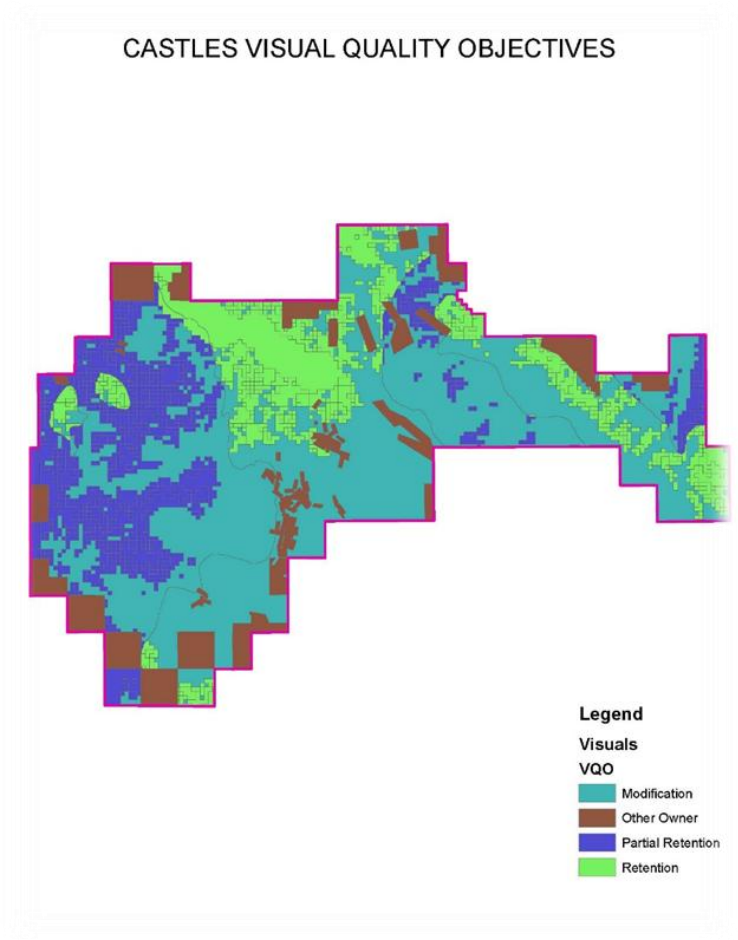

Figure 2 Castle Visual Quality Objectives

In addition, the following concepts were taken into consideration when compliance with both the "degree of alteration" and "duration of impact" criteria per VQO was determined:

- "Each landscape unit has its individual capacity to accept alteration without losing its inherent visual character" (USDA Forest Service 1974, p. 4).
- "Visual impact of management activities increase as the viewer's line of sight tends to become perpendicular to the slope upon which the management activity is to take place" (USDA Forest Service 1974, p. 4).
- Each objective describes a degree of acceptable alteration of the natural landscape based upon the importance of aesthetics (USDA Forest Service 1974, p. 28).
- Whether or not the disturbance from management activity is consistent with the natural disturbances viewed in the landscape is also considered when determining if a VQO was met (USDA Forest Service 1974, p. 30).

"Generally, considerable change can take place in the positive or natural appearing elements even under Retention VQO if the change achieves desirable variety and follows the principles of landscape design, such as proper scale and arrangement of these elements" (USDA Forest Service 1980, p. 7).

The project boundary and the aggregated viewshed from the sensitive viewing areas were used as the spatial bounds for determining direct and indirect effects for the analysis. This is the same boundary for cumulative effects analyses.

Methodology

This analysis was completed using the framework of the Visual Management System (VMS). VMS uses Visual Quality Objectives (VQO's) as standards and guidelines for managing scenic resources. The VQO refers to "degree of acceptable alteration of the characteristic landscape" (USDA Forest Service 1974, p. 46). The VQO is analyzed qualitatively using "degree of alteration" and "duration of impact" components from the "Visual Management System" (USDA Forest Service 1974, p. 28 and 30). In addition, degree of acceptable alteration is determined through the use of other agency handbooks, professional experience and judgment based on expected outcomes of similar activities elsewhere on the Forest. Field observations, existing visual condition, and, landscape character were used to determine baseline existing conditions. As Forest Plans undergo revision, the VMS is being replaced with a newer Scenery Management System (SMS). Although not required by the Forest Plan, concepts relating to healthy ecological conditions and the interface with sustainable scenery are also considered.

Proposed treatment methods were analyzed to determine if the effects to scenic resources were compatible with the assigned VQOs and if any design criteria or mitigation measures were necessary.

VQO acres for the project area were determined using the Forest Plan Management Area direction in conjunction with sensitive viewing areas identified in the Forest Plan. All sensitive areas identified adjacent to and within the project area when determining seen areas were considered. ArcMap, geographic information systems (GIS), was used to analyze the proposed activities in regards to visual quality objectives (VQO's). Distance zones (foreground, middleground, and background) from sensitive areas were mapped when determining seen areas. Seen areas from viewpoints were mapped with an ArcMAP viewshed analysis. The definition of seen area, for the purpose of this analysis, is an area mapped as potentially visible by the output of a viewshed GIS viewshed operation. This process uses a digital elevation model (DEM) to generate terrain. The DEM is a naked earth model- this operation doesn't account for the height and screening of vegetation, therefore visible areas in the GIS viewshed output are considered as possibly visible, not definitely visible.

If any portion of a unit is outputted as seen from the viewshed analysis, the whole unit was considered as seen. If a unit was seen in multiple distance zones, then the more restrictive VQO was used in the analysis.

In addition, key observation points were selected to generate Google Earth simulations. To analyze visual impacts, photos were taken in popular travel corridors during site visits to areas where proposed treatments would be seen and concern levels were high. Photos were compared to visual simulations performed in Google Earth. Numerous viewpoints were reviewed to determine the short and long term impacts to scenery within the resource area.

Incomplete and Unavailable Information

The locations of existing and new landings were not available at the time of analysis.

Affected Environment

Existing Condition

The Castle Mountain project area is within the Broad Valley Rockies sub-region (character type). This area can generally be described as having somewhat widely spaced mountain ranges separated by broad

valleys which occupy up to about 50 percent of the area. The valleys range from 2 to 15 miles wide and may reach 100 miles in length. This often provides a sweeping panorama to the viewer from valley floors. Elevations typically found in this vary from 3,000 to 6,500 feet, while the mountains vary from 6,500 to 7,000 feet in the eastern part of the sub-region (character type), to generally 9,500 feet in some places.

There are no glaciers and very few permanent snowfields present in this sub-region. Past glaciation becomes apparent in cirque and trough walls, U-shaped valleys and moraine debris in some of the higher mountain ranges. Rocklands are not a regularly present feature. However, when cliffs, outcrops, talus slopes, and scree do occur, as within the Castle Mountain project area, these features often becomes a dominant element in the landscape.

Vegetation serves to tie the landscape features together in this sub-region. There is frequently a strong inter- play of texture and color created by a mosaic of timber, shrub, and grass, such as groves of deciduous trees in grasslands or coniferous stands, stringers of timber or brush following stream courses into the grassland or, conversely, linear meadows along stream courses in timbered areas.

Disturbances, such as wildfire, insect and disease, and wind have substantially influenced the Existing Visual Condition (EVC) of the project area over time. As noted in the Vegetation, Fire, and Fuels report, extensive fires spread though the central portions of the Castle Mountains thirty-five to forty years ago and has continued to shape the visual condition. Reforestation over the years has also contributed to the existing seen landscape.

Starting in 2004, epidemic populations of MPB in the pine species have substantially altered forests species across the Castle Mountains by removing the larger diameter pine. The resultant visual effect of the beetle epidemic have left dead and dying trees across the landscape in not only the project area but throughout the sub-region.

The project area itself is not visible within the foreground or middleground distance zones from any sensitivity level 1 road or trail identified in the Forest Plan. Furthermore, the project area is not visible from recreation use areas in Management Area H. The only portions of the project area that can be seen are in the background distance zone, as shown in the figure below.

Figure 3 Project are visible in background distance zone

From background distance zone, (3 to 5 miles and greater) portions of the landscape that are seen are primarily texture and color but are weak with details. Strong color contrasts of sufficient size may still be noticeable, but moderate change from land management activities are difficult to perceive to the untrained eye.

Existing Visual Condition (EVC)

Existing Visual Condition (EVC) describes the visual appearance of the landscape at the time the project area scenery assessment in conducted. It excludes the context of whether the landscape is seen or not seen from sensitivity level 1 roads, trails or recreation use areas identified in the Forest Plan. EVC indicates the amount of change that has occurred in the past, and what level of change may be acceptable in the future. The relevance of EVC for this analysis is to use the present visual condition of the project area as a baseline to evaluate the acceptable desired future condition and cumulative effects outlined in the Forest Plan management prescription criteria. Six levels are used to describe the landscapes existing visual condition ranging from pristine to intensively modified:

- **Type I:** Landscapes where only ecological change has occurred, except for trails needed for access. Landscapes appear to be untouched by human activities.
- **Type II:** Landscapes where change is not noticed by the average forest visitor unless pointed out. These landscapes have been altered but changes are not perceptible.
- **Type III:** Landscapes where changes are noticeable by the average forest visitor, but they do not attract attention. Changes appear to be minor disturbances.
- **Type IV:** Landscapes where changes are easily noticed by the average forest visitor and may attract attention. Changes appear as disturbances but resemble natural patterns in the landscape.
- **Type V:** Landscapes where changes are very noticeable and would be obvious to the average forest visitor. Changes tend to stand out, dominating the view of the landscape, but are shaped to resemble natural patterns.
- **Type VI:** Landscapes where changes are in glaring contrast to the landscape's natural appearance. Changes appear as dramatic, large scale disturbances that strongly affect the average forest visitor.

The EVC is primarily in a Type I condition, as evidenced by the relatively small amount of noticeable disturbance within the project area. This condition however is not consistent throughout with some small portions of the project area in a Type V condition. ESI Type V rating is more a result of the extent of harvest than the direct visual appearance of the landscape when viewed from sensitivity level 1 roads, trails or recreation use areas.

Figure 4 Background view of Castle Mountains typical from highway corridors

Environmental Consequences

Environmental effects for each alternative were considered in detail and described from the expected perspective of the casual Forest visitor (USDA Forest Service 1974, p. 30). Effects from management activities were described using dominant elements (line, form, color, and texture) viewed within distance zones (foreground, middleground, and background) from a travel route, use area, or water body (USDA Forest Service 1974, p. 7 and p. 8). The degree of acceptable alteration ("degree of alteration" and "duration of impact") for each VQO was determined considering natural disturbances found in the characteristic landscape (USDA Forest Service 1974, p. 27, and p. 28). The size of a management activity is compared to the size of similar natural activities expected in the landscape. Activities mimicking natural disturbances or simulating vegetation patterns found or expected to be found in the landscape are said to be viewed similarly to their natural counterparts by the casual forest visitor. All previous information was used when determining acceptable duration of impact and degree of alteration for all effects sections under all alternatives. In addition the "rehabilitation goal" was used, as described in the Methodology section of this report, based on the criteria in the VMS and direction found in the Forest Plan.

Alternative 1 – No Action

No treatment action would be implemented on the Castles landscape and the existing condition would remain. Only ongoing uses, permitted activities and natural processes would continue. This is the baseline condition and will be used for comparison of effects. With regard to visual resources, there would be an increase in line, form, and color from viewing areas where beetle infested trees are evident as these trees lose their foliage in the short term. Effects of dead trees in the viewshed are added black lines in the landscape from the dead trees. Loss of these trees would equate to a decrease in the forest canopy followed by an increase in ground texture intermixed with the surrounding, remaining forest canopy leading to various size openings in the long-term. These effects would be noticeable in the foreground and middleground from sensitive areas by the casual forest visitor in the short and long term. Down woody material would increase as dead trees fall, increasing ground fuel density. The increase in fuel density would increase the potential for these areas to experience more intense forest fires.

There would be no vegetation treatments or fuel treatments implemented for alternative 1. There would be no construction of landings or roads built then obliterated in the project area.

Direct and Indirect Effects

There would be no direct or indirect effects for alternative 1 because no project activities are proposed.

Cumulative Effects

There would be no cumulative effects because no project activities are proposed under this alternative.

Conclusion

There are no direct or indirect effects from project activities. Effects from no action, previously described, could lead to an altered viewed landscape in the foreground and middleground views from sensitive areas. These dead trees would provide an altered landscape expected to be viewed as part of a natural disturbance by the casual forest visitor. However, dead trees could be considered undesirable elements in the landscape by some viewers. It could take 20 years or more before new vegetation fills in areas with beetle mortality allowing these areas to blend back into the landscape.

Visual quality objectives would be met since no management activity is proposed under this alternative; changes would be from ecological processes. The viewed vegetation patterns found in the characteristic landscape could undergo a change when effects from all infested trees viewed in the total seen area are considered. This alternative is in compliance with Forest Plan, policy, laws and regulations.
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Other Relevant Mandatory Disclosures
There are no other relevant mandatory disclosures for the visual resource.

Alternative 2 – Proposed Action

Alternative 2 would meet restoration objectives across the landscape using a variety of management tools and treatment types. This alternative would require temporary road construction to mechanically treat the most acres across the landscape to meet desired conditions. Alternative 2 would provide commercial wood products. The wildlife analysis for this alternative will include a site specific Forest Plan Amendment for 2 standards which will not affect Visual Resources in any way.

Table 3 Alternative 2 Treatments and Acreages

Treatment Type	Acres Not in IRA	Acres In IRA	Grand Total
DF_REST_THIN	945.2	-	945.2
LP_REGEN	1,189.1	-	1,189.1
MDW_REST	6,760.1	1,910.3	8,670.4
Pre-Commercial Thinning	308.3	-	308.3
QA_REST	269.3	53.6	322.9
RX_FIRE	3,792.0	3,964.4	7,756.4
Stand Improvement Thinning	1,656.4	-	1,656.4
WBP_REST	11.8	844.6	856.4
Grand Total	**14,932.1**	**6,772.9**	**21,705.0**

Project Design Features and Mitigation Measures

Design criteria selected from the Northern Region's Scenic Resource Mitigation Menu & Design Considerations for Vegetation Treatments (2009). Based on review of the action alternatives, the following design considerations are recommended. The list is not all inclusive and some may not be applicable to the entire project area, e.g. some will be more suitable to units in areas seen in foreground views and others to units in areas seen in background views. To the extent feasible, the following should be considered during unit layout and implementation.

All Units:

- Blend units including fuel breaks with natural landscape features such as natural openings, rock outcrops, and topography. Harvest units should be shaped to mimic natural patterns found in the landscape. Straight lines or geometric shapes should be avoided. Unit edges should be natural appearing, to mimic the adjacent natural landscape character (undulate/feathered).
- For units that have VQO's of Retention and Partial Retention or are seen from sensitive viewing areas, trails and roadsides, the Forest Landscape Architect will work with the Silviculturist, Planning Forester, and fuels AFMO as needed on the design and/or layout of units.
- Temporary road locations should be designed to fit the landscape with a minimum degree of landform alteration limiting the amount of earthwork. Planning and design of alignments should consider minimizing impacts to scenic resources.
- Disturbed areas, including but not limited to temporary road, landing construction, scars from burn piles etc. would be re-vegetated after the site has been satisfactorily prepared. The operator would be advised as to species from Forest Botanist, methods of re-vegetation, and seasons to plant. Forest would monitor seeding and/or planting would be repeated until satisfactory re-vegetation is accomplished.

- All equipment and construction debris would be removed from the site.

Roads / Skid Trails:

- During road construction, save topsoil by side casting for later use in rehabilitation.
- Where new access roads and skid trails meet a primary travel route, they should intersect at a right angle and, where feasible, curve after the junction to minimize the length of route seen from the primary travel route.
- Where feasible, retain screening trees one tree-height below roads and landings (including portions of cable units). Avoid creating a straight edge of trees by saving clumps of trees and single trees with varied spacing.
- During temporary or permanent (including maintenance or reconstruction) road construction, clearing slash and root wads will be eliminated or removed from view in the immediate foreground.
- Cut and fill banks will be sloped to accommodate natural revegetation.
- Cut and fill slopes will be revegetated with native species where ever possible.

Slash:

- Ensure slash is abated near landings by scattering, chipping, or other techniques.
- If slash piles are to be burned, take necessary actions to achieve 95% or more consumption. Following burning, concentrations of unconsumed slash would be scattered. Maximize utilization and removal of fuel to reduce the amount of slash to be burned.
- Utilize designation by description (species designation) where appropriate to minimize the amount of necessary marking paint.
- Minimize skyline corridors and work with the Forest Landscape Architect to blend the resulting corridors in with the surrounding environment. This can be achieved through the silvicultural prescription and design/layout.
- Use cut tree (as opposed to leave tree) marking in visually sensitive areas where appropriate.
- Log landings, roads, gravel pits, borrow areas, and bladed skid trails should be minimized within sensitive view sheds.
- Aesthetic values should be considered when selecting landing locations. Project manager should consult with the Landscape Architect during implementation to identify options to minimize impacts in visually sensitive areas.
- Where feasible road or trail closures should be considered to allow short-term landing and decking on the road to reduce the extent of disturbance.
- In visually sensitive areas consideration should be given to processing trees within the unit and only decking adjacent to roadsides.
- The views of skid trails should be minimized.
- When appropriate, use Jack leg fence or natural barriers to block reclaimed skid trails and temp roads from further use.

- In sensitive foreground areas: for hand treatments, stumps shall be cut to 8 inches or less. Stumps shall be cut as low as possible (8 inches or less is preferred) when mechanically treated and when restricted by terrain, such as boulders or rock.
- Slash, root wads and other debris will be removed, burned, chipped or lopped to a height of 2 feet or less. The effect of scattering the slash should mimic the adjacent natural environment.
- Slash damaged residuals below the lowest live limb.
- Slash piles should generally be burned within two years unless fuel or weather conditions are not conducive for attaining the 95% consumption objective.
- After burning, in addition to seeding with native species, burn piles will be monitored for invasive species. If necessary an integrated pest management strategy will be employed to eradicate invasive species.
- Aesthetic values should be considered when determining the method to mark unit boundaries. When possible use flagging or description.
- Unit boundaries post-implementation will be assessed for visual impacts and mitigated appropriately.

Monitoring

Monitoring shall be conducted during the final design, layout and implementation of the project to ensure design measures are applied to minimize impacts to scenery. Within the first two years of project implementation, monitoring will occur in order to assess the effectiveness of mitigation measures in meeting VQOs within those units that are potentially sensitive to change to scenery resources.

Direct and Indirect Effects –Alternative 2

The effect of implementing Alternative 2 would result in the management of approximately 21,705 total acres throughout the project area after harvest activities are completed. There are no visible units within the foreground or middleground from any sensitivity level 1 road or trail associated with Alternative 2. Furthermore, there are no proposed units visible from recreation use areas in Management Area H.

Small portions of prescribed fire units 225, 230, and 302 may potentially be seen from the background distance zone, from Highway 12. Prescribed fire may be used as the silvicultural treatment in Douglas-fir and lodgepole pine stands that are not accessible by roads for mechanical treatment. Underburning could be used in Douglas-fir stands to reduce understory tree density and reduce surface fuels. The visual effects will in indiscernible where underburning treatment is used. Mixed severity fire (ranging from underburn to complete overstory tree mortality) could be used in lodgepole pine to create patches of natural regeneration resulting in a visual mosaic of age classes distributed across the landscape. The visual disturbance associated with these prescribe fire treatments would be minor and difficult for the untrained eye to detect in the background distance zone from Highway 12.

Due to the low visibility of management activities from any sensitivity level 1 road, trail or recreation use areas, all units associated with Alternative 2 will meet their corresponding VQO as allocated in the Lewis & Clark Forest Plan. The direct and indirect effect to visual resources resulting from all land management activities associated with Alternative 2 will be within forest plan standards and guidelines for scenery resources.

Unavoidable Adverse Effects

Unavoidable adverse effects to scenery include the immediate visual change to the existing landscape character after project implementation. Where managed stands are seen, a noticeable differences may take place between naturally occurring landscapes and those managed for timber. Overtime these changes

become more subtle as managed stands reach a point of maturity. At that time the effects of management blend into more natural occurring forests characteristics.

Irreversible and Irretrievable Commitments of Resources

There are no irreversible or irretrievable commitments of resources associated with this analysis as they relate to scenery. The effects of harvest and road construction will overtime regain naturally occurring characteristics as seen by the casual observer. The landscape will resume those visual characteristics anticipated by the general public immediately after implementation and within the short term timeframe. Design criteria has been established with regard to all management activities to increase the rate of visual recovery. Therefore, no irreversible or irretrievable commitments of visual resources are anticipated after project implementation.

Cumulative Effects

The cumulative effects analysis area for this resource is the project area, including both National Forest System lands and those under other adjacent ownership. This spatial boundary includes the views from sensitivity level 1 travel routes and use areas identified in the forest plan. Temporal bounds for cumulative effects are the same as direct and indirect effects; 1 to 5 years for short-term and 6 years and beyond for long-term. Analysis methods are the same as for direct and indirect effects. Issue Indicator: Whether or not the Visual Quality Objectives of retention, partial retention, and maximum modification would be achieved in the project area.

Since there are no regulations for scenic resource management on private lands, the effects of ongoing private development adjacent to Forest lands can sometimes have negative effects on scenic resources of the continuous landscape. When activities on private land are designed to limit impacts to scenic resources, the differences between private lands and Forest lands are less noticeable.

Past and Ongoing Activities in the Analysis Area

Past and ongoing management activities including but not limited to timber harvesting / vegetation management, mining, domestic grazing and range management, transportation system construction, summer and winter trail maintenance and construction. It is anticipated that visual resource objectives in the Lewis & Clark Forest Plan would be met regarding these ongoing activities planned in the cumulative effects analysis area.

Fire suppression, when it occurs, would attempt to control the spread of fire leaving as much of the forest canopy intact as possible. Since fire suppression would limit large fires in the project area, it is a tool in maintaining the characteristic landscape. Like fire suppression, noxious weed management is a tool in maintaining the characteristic landscape. Treatment of noxious weeds would continue to improve the visual characteristics of the analysis area. These activities considered with the proposed actions do not contribute to cumulative effects regarding visual/scenery resources. It is anticipated that the Forest Plan would be met with the addition of fire suppression and noxious weeds management.

Reasonable Foreseeable Activities in the Analysis Area

There are no foreseeable ground disturbing activities associate in the analysis area at this time.

Forest Plan Consistency

Alternative 2, if implemented is consistent with the visual resource management direction in the Lewis and Clark Forest Plan. The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources.

Conclusions

The proposed activities would promote rehabilitation of the landscape improving natural visual characteristics in the long-term. Forest-wide standards for Insects and Disease provide direction to use silvicultural systems to: (1) improve species diversity and growth, and vigor for stands, and (2) increase the size diversity and class diversity between stands. The management activities proposed in this project are tools to rehabilitate the vegetative condition within the project area. Several large stands of dead trees would be removed, providing an opportunity to improve the species diversity, growth and vigor of the vegetation. The Visual Management System identifies rehabilitation as a short-term management alternative. "Landscape rehabilitation is used to restore landscapes containing undesirable visual impacts to a desired visual quality. It may not always be possible to immediately achieve the prescribed visual quality objective with rehabilitation, but should provide a more visually desirable landscape in the interim" (USDA, 1974).

The potential direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources because the application of the landscape rehabilitation management alternative as outlined in the VMS would allow a longer period of time for the retention VQO to be achieved. There are no units in alternative 2, or any subsequent alternative that would be seen from sensitivity level 1 roads trails, or use areas. All management activity associated with alternative 2, in the Castle Mountain Restoration project, will meet or exceed forest plan direction for visual resources.

Alternative 3

Alternative 3 meets restoration objectives across the landscape using a variety of management tools and treatment types that will optimize a variety of wildlife habitat across the landscape. The design of this alternative puts emphasis on maintaining effective big game travel corridors, suitable lynx habitat areas, maintains open meadows and natural parks, promotes White bark Pine and aspen regeneration. Prescribed fire will be utilized to mimic natural process as a standalone treatment as well as in conjunction with other treatments. This alternative would provide a level of commercial wood products and is responsive to several scoping comments including harvest opening sizes, temporary roads, water quality and big game security. If wildlife habitat were optimized as described in alternative 3, the effects to visual resources would be similar to alternative 2.

Table 4 Alternative 3 Treatments and Acreages

Treatment Type/Treatment Cat.	Acres Not in IRA	Acres In IRA	Total
DF_REST_THIN	768	-	768
LP_REGEN	376	-	376
MDW_REST	6,653	1,896	8,549
None	3,657	907	4,564
Old Growth, Commercial Lands	1,811	590	2,400
Old Growth, Commercial Lands; PFA	284	-	284
Old Growth, NonCommercial Lands	185	38	224
Old Growth, NonCommercial Lands; PFA	21	-	21
PFA No Treatment	1,357	279	1,636
Plant Shrubs	7	-	7
Pre-Commercial Thinning	286	-	286
QA_REST	285	54	339
RX_FIRE	3,524	3,110	6,634
Stand Improvement Thinning	1,161	-	1,161
WBP_REST	12	845	856
Grand Total	**16,728**	**6,811**	**23,539**

Irreversible and Irretrievable Commitments
No irreversible or irretrievable commitments of resources are anticipated.

Cumulative Effects

The cumulative effects for Alternative 3 are the same as Alternative 2 except for additional acres of Old Growth. Refer to Alternative 3 map for proposed activities and the units planned and implemented for the Castle Mountain Restoration Project. The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources. The application of the landscape rehabilitation management alternative as outlined in the VMS would allow a longer period of time for the retention VQO to be achieved if designated. The potential direct and indirect visual effects from the additional old growth acres proposed in alternative 3 would result in the same visual effect as if alternative 2 were implemented. The potential effects to visual resources from activities proposed in alternative 3 are additional acres spatially but visually similar as alternative 2. It is anticipated that visual resource objectives in the Lewis & Clark Forest Plan would be met regarding these ongoing activities planned in the cumulative effects analysis area.

Past and Ongoing Activities in the Analysis Area

Past and ongoing management activities are similar to alternative 2. Included are timber harvesting / vegetation management, mining, domestic grazing and range management, transportation system construction, summer and winter trail maintenance and construction.

Similar to alternative 2 fire suppression, when it occurs, would attempt to control the spread of fire leaving as much of the forest canopy intact as possible. Since fire suppression would limit large fires in the project area, it is a tool in maintaining the characteristic landscape. Like fire suppression, noxious weed management is a tool in maintaining the characteristic landscape. Treatment of noxious weeds would continue to improve the visual characteristics of the analysis area. These activities considered with the proposed actions do not contribute to cumulative effects regarding visual/scenery resources. It is

anticipated that the Forest Plan would be met with the addition of fire suppression and noxious weeds management.

Reasonable Foreseeable Activities in the Analysis Area

There are no foreseeable ground disturbing activities associate in the analysis area at this time.

Forest Plan Consistency

Forest plan consistency is the same for alternative 3 as disclosed for alternative 2.

The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources. The application of the landscape rehabilitation management alternative as outlined in the VMS would allow a longer period of time for the retention VQO to be achieved if management activities were to occur within that VQO designation.

Conclusions

There are additional treatments acres associated with alternative 3 than in alternative 2. Most of the additional acres in alt 3 are a result of the Old Growth unit inclusion. Old Growth was identified through scoping as a natural resource that the public is concerned about maintaining. The current level of old growth and potential old growth are key to public interest. This interest led to defining a strategy for maintaining a level of old growth that will meet wildlife needs. The inclusion of these additional acres in Alternative will not affect visual resources within the project area beyond the allowable limits of acceptable change. The proposed activities in Alternative 3 would promote rehabilitation of the landscape, improving natural visual characteristics in the long-term. Forest-wide standards for Insects and Disease provide direction to use silvicultural systems to: (1) improve species diversity and growth, and vigor for stands, and (2) increase the size diversity and class diversity between stands. The management activities proposed in this alternative are tools to rehabilitate the vegetative condition within the project area. Several large stands of dead trees would be removed, providing an opportunity to improve the species diversity, growth and vigor of the vegetation. The Visual Management System identifies rehabilitation as a short-term management alternative. “Landscape rehabilitation is used to restore landscapes containing undesirable visual impacts to a desired visual quality. It may not always be possible to immediately achieve the prescribed visual quality objective with rehabilitation, but should provide a more visually desirable landscape in the interim” (USDA, 1974)

Alternative 4

Alternative 4 was developed during scoping and derived as a result of exploring treatments that would not require a forest plan exception (amendment) to a standard. This alternative would only treat a limited number of acres primarily on the west side of the analysis area and will not meet the desired restoration objective across the landscape. This alternative has been developed and considered but will not be analyzed in detail as it would not meet the project purpose and need for landscape level restoration.

Alternative 4 would not impact visual resources beyond the existing condition alternative. There would be no perceptible change to visual resources if alternative 4 were implemented.

Table 5 Alternative 4 Treatments and Acreages

Treatment Type	Acres Not in IRA	Acres In IRA	Total
DF_REST_THIN	27.9	-	27.9
LP_REGEN	178.4	-	178.4
MDW_REST	974.2	595.3	1,569.5
QA_REST	10.7	53.6	64.3
RX_FIRE	200.1	208.9	409.0
Stand Improvement Thinning	128.3	-	128.3
WBP_REST	11.8	844.6	856.4
Grand Total	**1,531.4**	**1,702.3**	**3,233.7**

Irreversible and Irretrievable Commitments

No irreversible or irretrievable commitments of resources are anticipated.

Cumulative Effects

The cumulative effects associated with Alternative 4 are much less than were analyzed in either Alternative 2 or 3. The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources. It is anticipated that visual resource objectives designated in the Lewis & Clark Forest Plan would be met if alternative 4 were implemented

Past and Ongoing Activities in the Analysis Area

Past and ongoing management activities are similar to alternative 2 and 3. Included are timber harvesting, vegetation management, mining, domestic grazing and range management, transportation system construction, summer and winter trail maintenance and construction.

Similar to alternative 2 and 3 fire suppression, when it occurs, would attempt to control the spread of fire leaving as much of the forest canopy intact as possible. Since fire suppression would limit large fires in the project area, it is a tool in maintaining the characteristic landscape. Like fire suppression, noxious weed management is a tool in maintaining the characteristic landscape. Treatment of noxious weeds would continue to improve the visual characteristics of the analysis area. These activities considered with the proposed actions do not contribute to cumulative effects regarding visual/scenery resources. It is anticipated that the Forest Plan would be met with the addition of fire suppression and noxious weeds management.

Reasonable Foreseeable Activities in the Analysis Area

There are no foreseeable ground disturbing activities associate in the analysis area at this time.

Forest Plan Consistency

Forest plan consistency is the same for alternative 4 as disclosed in alternative 2 and 3.

The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources. The application of the landscape rehabilitation management alternative as outlined in the VMS would allow a longer period of time for the retention VQO to be achieved if management activities were to occur within that VQO direction.

Conclusions

The proposed activities in Alternative 4 would promote rehabilitation of the landscape, improving natural visual characteristics in the long-term. Forest-wide standards for Insects and Disease provide direction to use silvicultural systems to: (1) improve species diversity and growth, and vigor for stands, and (2) increase the size diversity and class diversity between stands. The management activities proposed in this alternative are tools to rehabilitate the vegetative condition within the project area. Several large stands of dead trees would be removed, providing an opportunity to improve the species diversity, growth and vigor of the vegetation. The Visual Management System identifies rehabilitation as a short-term management alternative. "Landscape rehabilitation is used to restore landscapes containing undesirable visual impacts to a desired visual quality. It may not always be possible to immediately achieve the prescribed visual quality objective with rehabilitation, but should provide a more visually desirable landscape in the interim" (USDA, 1974)

Alternative 5

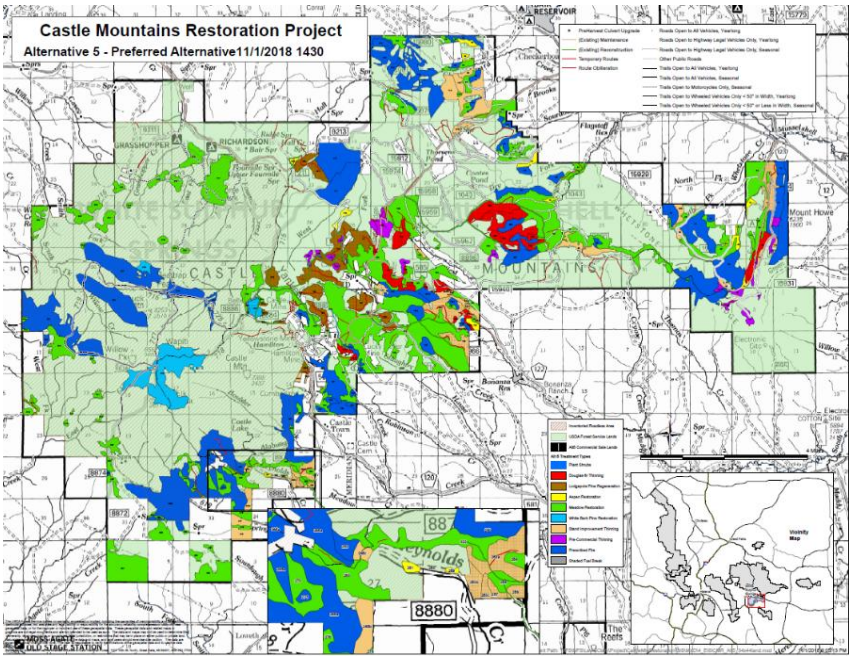

Figure 5 Alternative 5

Alternative 5 meets restoration objectives that was developed to respond to several comments relating to fuels concerns adjacent to private lands and the alternative ensures operational feasibility during implementation. This alternative contains the addition of two (new) prescribed fire units in Hall Creek, as well as one aspen enhancement and the 2 lodgepole regeneration units analyzed under Alternative 3 in Hall Creek. Unit boundary alterations in several previously analyzed units were done within the existing treatment footprint. Stand Improvement treatments are being displayed for non-commercial and commercial. No harvest would occur in the IRA and ownership alignment was completed based on an updated state land ownership layer. The wildlife analysis for this alternative will include the site specific Forest Plan Amendment for 2 standards.

If alternative 5 were implemented as described, the effects to visual resources would be similar to alternative 2.

Table 6 Alternative 5 Treatments and Acreages

Alternative 5			
Treatment Type	**Acres Not in IRA**	**Acres In IRA**	**Total**
DF_REST_THIN	1114.3		1114.3
LP_REGEN	1155.3		1155.3
MDW_REST	6998.4	1780	8,778.40
Plant Shrubs	6.6		6.6
Pre-Commercial Thinning	419.4		419.4
QA_REST	273.7	13	286.8
RX_FIRE	4743.1	3320.1	8063.2
Stand Improvement Thinning	1,758.10	41.00	1,799.10
Commercial	676.6		676.6
Non-commercial	1081.5	41	1122.5
WBP_REST	83.3	844.6	927.9
Commercial	71.6		71.6
Non-commercial	11.8	844.6	856.4
Grand Total	**16552.2**	**5998.7**	**22551**

Irreversible and Irretrievable Commitments

No irreversible or irretrievable commitments of resources are anticipated.

Cumulative Effects

The cumulative effects to visual resources for Alternative 5 would be similar to those effects associated with Alternative 2. Refer to Alternative 5 map for proposed activities and the units planned and implemented for the Castle Mountain Restoration Project. The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources. The application of the landscape rehabilitation management alternative as outlined in the VMS would allow a longer period of time for the retention VQO to be achieved if designated. The potential direct and indirect visual effects from the additional old growth acres proposed in alternative 5 would result in the same visual effect as if alternative 2 were implemented. The potential effects to visual resources from activities proposed in alternative 5 are additional acres spatially but visually similar as alternative 2. It is anticipated that visual resource objectives in the Lewis & Clark Forest Plan would be met regarding these ongoing activities planned in the cumulative effects analysis area.

Past and Ongoing Activities in the Analysis Area

Past and ongoing management activities are similar to alternative 2. Included are timber harvesting / vegetation management, mining, domestic grazing and range management, transportation system construction, summer and winter trail maintenance and construction.

Similar to alternative 2 fire suppression, when it occurs, would attempt to control the spread of fire leaving as much of the forest canopy intact as possible. Since fire suppression would limit large fires in the project area, it is a tool in maintaining the characteristic landscape. Like fire suppression, noxious weed management is a tool in maintaining the characteristic landscape. Treatment of noxious weeds would continue to improve the visual characteristics of the analysis area. These activities considered with the proposed actions do not contribute to cumulative effects regarding visual/scenery resources. It is anticipated that the Forest Plan would be met with the addition of fire suppression and noxious weeds management.

Reasonable Foreseeable Activities in the Analysis Area

There are no foreseeable ground disturbing activities associate in the analysis area at this time.

Forest Plan Consistency

Forest plan consistency is the same for alternative 5 as disclosed for alternative 2.

The direct, indirect, and cumulative effects of the proposed activities to visual resources would be consistent with forest plan direction for visual resources. The application of the landscape rehabilitation management alternative as outlined in the VMS would allow a longer period of time for the retention VQO to be achieved if management activities were to occur within that VQO designation.

Conclusions

There are additional treatments acres associated with alternative 5 than in alternative 2. The inclusion of these additional acres in Alternative 5 will not affect visual resources within the project area beyond the allowable limits of acceptable change. The proposed activities in Alternative 5 would promote rehabilitation of the landscape, improving natural visual characteristics in the long-term. Forest-wide standards for Insects and Disease provide direction to use silvicultural systems to: (1) improve species diversity and growth, and vigor for stands, and (2) increase the size diversity and class diversity between stands. The management activities proposed in this alternative are tools to rehabilitate the vegetative condition within the project area. Several large stands of dead trees would be removed, providing an opportunity to improve the species diversity, growth and vigor of the vegetation. The Visual Management System identifies rehabilitation as a short-term management alternative. “Landscape rehabilitation is used to restore landscapes containing undesirable visual impacts to a desired visual quality. It may not always be possible to immediately achieve the prescribed visual quality objective with rehabilitation, but should provide a more visually desirable landscape in the interim” (USDA, 1974)

There would be no discernable visual difference between alternative 2, 3 or 5 if implemented. All action alternatives would be consistent with Forest Plan direction for Visual Resources within the Lewis & Clark Forest Plan.

FOREST PLAN SITE SPECIFIC AMENDMENT

- The first standard which needs exempting is Management Standard C-1 (5) which requires that drainages containing identified summer/fall elk range be maintained at 30 percent or greater effective hiding cover (as defined in the Forest Plan).
- The second standard which needs exempting is the standard from Management Direction for Management Area C lands that requires maintenance of effective hiding cover percentages by

timber compartment at an average of 40 percent with a minimum 0f 35 percent for any individual sub-compartment. Of the 24 watersheds that contain summer/fall range, 14 are currently below the standard and 5 are so close to the standards that any treatment that removes cover (harvest or burning) would be precluded. This amendment would allow the Forest to reduce hiding cover below the plan standards to meet project objectives for this project only.

There would be no perceptible change to visual resources outside Forest Plan direction if alternative 2, 3, or 5 and the Forest Plan site specific amendments were implemented. Direct, indirect and cumulative resource impacts would be similar to Alternative 2. These impacts would be neither beneficial nor adverse to visual resources due to the limited degree of visibility of management activity from Forest Plan identified roads and tails, as well as from Sensitivity Level I viewpoints.

Glossary of Terms

Background. Area located from 3-5 miles to infinity from the observer.

Characteristic Landscape. The naturally established landscape within a scene or scenes being viewed.

Distance Zones. Landscape areas denoted by specified distances from the observer. Distance zones are used as a frame of reference in which to discuss landscape attributes or the scenic effect of human activities in a landscape.

Foreground. The detailed landscape found within 0 to ¼ to ½ mile from the observer.

Landscape Character. A combination of physical, biological, and cultural images that gives an area its visual and cultural identity and helps to define a "sense of place." Landscape character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity.

Landscape Visibility. Visual accessibility of the landscape to viewers, referring to one's ability to see and perceive landscapes and to the relative importance and sensitivity of what is seen and perceived in the landscape. Concern levels and distance zones are elements of landscape visibility.

Maximum Modification. A visual quality objective meaning man's activity may dominate the characteristic landscape but should appear as a natural occurrence when viewed as background.

Middleground. The space between the foreground and the background in a picture of landscape. The area located from ¼ to ½ to 3-5 miles from the viewer.

Modification. A visual quality objective meaning man's activity may dominate the characteristic landscape but must, at the same time, utilize naturally established for, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.

Partial Retention. A visual quality objective which in general means man's activities may be evident but must remain subordinate to the characteristic landscape.

Retention. A visual quality objective which in general means man's activities are not evident to the causal forest visitor.

Rehabilitation. A short term management alternative used to return existing visual impacts in the natural landscape to a desired visual quality.

Scenery Management. The art and science of planning and designing landscape attributes relative to the appearance of places and expanses in outdoor settings. Scenery management involves administering the use of National Forest System lands within the context of multiple-use ecosystem management to ensure high quality scenery for the overall well-being and psychological welfare of society and future generations.

Sensitivity Level 1 Travel Corridors. Travel corridors used frequently by the public where quality scenic resources are a highly valued.

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